

Citation for published version:

Pegg, E, Pandit, H, Dodd, CAF & Murray, D 2014, 'Minimising risk of tibial fracture after cementless unicompartmental knee replacement', British Association for Surgery of the Knee, Norwich, UK United Kingdom, 8/04/14 - 9/04/14.

Publication date:

2014

Document Version

Publisher's PDF, also known as Version of record

[Link to publication](#)

University of Bath

Alternative formats

If you require this document in an alternative format, please contact:
openaccess@bath.ac.uk

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Minimising Risk of Tibial Fracture After UKR

EC Pegg, HG Pandit, CAF Dodd, DW Murray
Nuffield Department of Orthopaedics, Rheumatology and
Musculoskeletal Sciences, University of Oxford, UK

Aim

- Characterise mean saw cut lengths for Oxford UKR
- Examine how saw cut length affects the risk of tibial fracture

Measurement of saw cut excess (n=24)

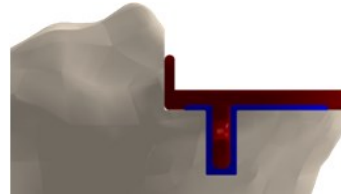
		Mean	Max
Vertical Cut (mm)	Posterior	4.25±3.9	12.0
	Anterior	0.46±1.0	4.0
Horizontal Cut (mm)	Posterior	1.26±2.1	7.5
	Anterior	0.73±0.9	3.0

Summary

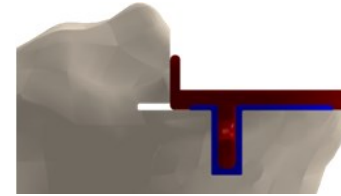
- Typically, vertical saw cuts are significantly greater posteriorly
- Excessive vertical cuts present a greater risk of tibial fracture compared with horizontal cuts

FE Model Summary

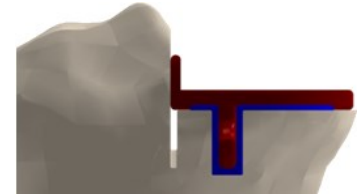
Perfect Cut






Excessive Horizontal Cut



Excessive Vertical Cut



Results

-  = high risk of fracture
-  = slight risk of fracture
-  = no risk of fracture

